Idea spot 575

User's Manual rel. 1.0

SGM®
LIGHT TECHNOLOGY

GB I

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Safety information

Read the instructions in this manual carefully, as they give important instructions regarding installation, operation and maintenance safety.

This manual must be kept with the fixture for future consultation. In the event of the fixture being sold or passed to another user, always make certain that the booklet is with the unit, to enable the new owner to be informed on its operation and relative care.

- Unit not for home use; only for professional use.
- After having removed the packaging, make certain the unit is not damaged in any way. When in doubt, do not use the unit, and contact an authorized SGM Technical Assistance Centre.
- The various part of the packaging (plastic bags, polystyrene foam, nails, etc.) must not be left within children's reach, as they are potential sources of danger.
- The unit must only be used by adults. Do not allow children to tamper with or use the product.
- Fixture installation work must be carried out by experienced qualified staff.
- Avoid using the fixture in locations subject to vibrations, or possible impacts
- Avoid using the fixture in locations in which the temperature is above 35° or below 2°C
- Do not attempt to dismantle or modify the fixture.
- The fixture must be kept at a minimum distance of 1.5 metres from surfaces to be illuminated.
- In the event of serious problems or faulty operation, switch off the fixture and immediately contact the nearest SGM Technical Assistance Centre or contact the manufacturer directly.
- Do not open the fixture: there are no user-repairable parts inside.
- Never try to repair the fixture personally. Repairs carried out by unauthorized staff can cause damage or faulty operation. Always contact the nearest authorized Technical Assistance Centre.

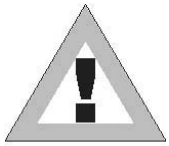
Safeguard the environment: do not throw away the remaining packaging: consign them to your dealer, or a special waste collection point.

General Warranty Conditions

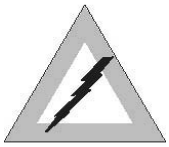
- The unit is guaranteed for 24 months from the date of purchase against manufacturing faults of the unit or the material it is made from
- Faults or breakdowns caused by inexperienced or incorrect use of the unit are not covered by the guarantee
- The guarantee will be considered null and void if the unit has been opened or tampered with by unauthorized personal
- The guarantee does not foresee the replacement of the unit
- External components such as handles, switches and removable parts are excluded from the guarantee
- Transport costs and consequent risks are the responsibility of the unit's owner
- The validity of the guarantee is effective to all effects only on presentation of the guarantee to the manufacturer or the SGM technical assistance centre
- Always quote unit serial number and model when contacting the dealer for information or assistance

Manual symbols

This manual uses graphic symbols to emphasize any hazards during the operation work described.



This symbol indicates a General hazard



This symbol indicates electric shock risk

This symbol indicates a hot surface risk

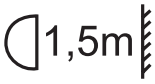
This symbol indicates that the unit must not be laid on an inflammable surface or in any case must be kept away from naked flames

Technical Features

New motorized rotating head
Abs covers
Both PAN and TILT are controlled by encoder
Pan: max movement 540° (16 bit)
Tilt: max movement 319° (16 bit)
Display for addresses and setting
Power supply: 230 V 50-60 Hz
Power consumption: 800 VA with in-built factor correction
Lamp: MSR 575/2 W discharge lamp
Control: max 16 channels DMX 512
Linear dimmer
Shutter: strobe max 10 flash/sec + strobe at random speed and evanescence (opening and closing) at 4 different speeds
Colours: 8 dichroic filters with high chromatic yeld + white, 9 different rotating speeds to produce Rainbow effect.
Gobos: 7 rotating and indexable gobos + open
3 sides prism (angle 14°) with different rotation speed to right or left
Motorized focus
Frost
3 light beam angles (13°/18°/21°)
Optical system: 3 lenses with double antireflective treatment
Working position: any position
Weight:26 kg

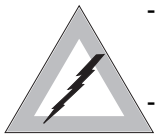
Important safety information

Fire prevention:



- IDEA uses a Philips 575 MSR/2. The use of any alternative lamp is not recommended and will null and void the fixture's warranty.
- Never locate the fixture on any flammable surface.
- Minimum distance from flammable materials: 0.5 m.
- Minimum distance from the closest illuminable surface: 2 m.
- Replace any blown or damaged fuses only with those of identical value. Refer to the wiring diagram if there is any doubt.
- Connect the projector to mains power via a thermal magnetic circuit breaker.

Prevention of electric shock:



- High voltage is present inside the unit. Isolate the projector from the mains supply prior to performing any function which involves touching the inside of the unit, including lamp replacement.
- The level of technology inherent in the IDEA requires the assistance of specialised personnel for all servicing. Refer all work to your authorised SGM service centre.
- A good earth connection is essential for proper functioning of the projector.
- Never connect the unit without proper earth connection.
- The fixture should never be located in a position exposed to rain or in areas of extreme humidity. A steady supply of circulating air is essential.

Protection against ultraviolet radiation:

- Never turn the lamp on if any of the lenses, filters or the carbon fibre housing is damaged. Their respective shielding functions will only operate efficiently if they are in perfect working order.
- Never look directly into the lamp when it is on.

Safety:

- The projector should always be installed with bolts, clamps and other fixtures that are capable of supporting the weight of the unit.
- Always use a second safety chain of a suitable rating to sustain the weight of the unit in case of the failure of the main fixing point.
- The external surface of the unit, at various points, may exceed 150°C. Never handle the unit until at least 10 minutes have elapsed since the lamp was turned off.
- Always replace the lamp if any physical damage is evident.
- Never install the fixture in an enclosed area lacking sufficient air flow. The ambient temperature should not exceed 35°C.
- A hot lamp may explode, so always wait for at least 10 minutes to elapse after the unit has been turned off prior to attempting to replace the lamp.
- Always wear suitable hand protection when handling the lamp.

Level of protection against the penetration of solid and liquid matter:

The projector is classified as an ordinary appliance and its level of protection against the penetration of solid and liquid matter is IP 20. IDEA uses 575W Philips 575 MSR/2 lamps with GX 9.5 base.
The temperature inside the projector can reach 250° C after just 5 minutes, but it can get as high as 350° C. Always check that the lamp is cold before attempting to remove it. In any case, only open the appliance 10 minutes after it has been turned off.

1.0 – Installation

1.1 – Access to the internal components

It is possible to inspect the inside of the projector by removing the cover as indicated below.

ATTENTION! remove mains power prior to accessing the projector's internal components.

1. Loosen the screws which fix the upper and lower covers (photo 1) and unscrew the side covers (photo 2).
2. Once unscrewed, simply lift the covers to access the internal components (photo 3).

photo 1

photo 2

photo 3

1.2 - Mounting the lamps

Warning: turn power off before opening the appliance.

Philips 575 MSR/2
Power 575W
Luminous flux 49,000 lm
Colour temperature 7.200°K
Lampbase GX9,5
Rated life 1,000 hours

1. Using a head screwdriver, remove the 3 screws (X,Y, Z) (photo 1, black screws) which hold the lampholder in place and are located at the rear of the projector head.

Photo 1

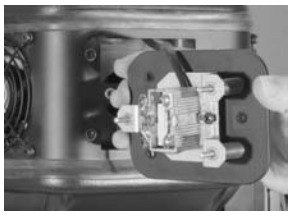


Photo 2

Photo 3

Photo 4

2. Remove the lampholder unit. Locate the lampholder (photo 2).
3. Insert the lamp (photo 3).
4. The lamp used is manufactured from quartz glass and should be handled with care. Always adhere to the instructions supplied in the lamp's packaging. Never touch the glass directly but use the tissue provided in the lamp's packaging. The GX 9.5 lampbase is symmetrical.

5. DO NOT USE UNDUE FORCE ON THE GLASS. In case of difficulty, re-read the instructions and repeat the procedure.
6. Replace the lamp assembly (photo 4) and replace and tighten the screws (X,Y,Z), which were previously removed (photo 1).

1.3 - Alignment lamp

Attention: we recommend that the lamp be realigned in the optical train of the unit to avoid overheating of the dichroic filters and other components inside the unit. (Photo 5).

Photo 5

Alignment is carried out using the 3 adjusters A, B and C (white screws).
During this operation you must bring the hot-spot to the centre of the beam and flatten it as much as possible.

1.4 - Replacing gobos:

IDEA uses a mechanical system which allows the fixture's gobos to be removed without the use of specialist equipment. Replacement gobos should be made of either heat resistant glass or metal.
An ever-increasing range of gobos is available from your SGM sales network.
Gobo dimensions are as follows:

ø external = 28 mm (or 27 mm from the back)
ø of image with defined edge = 24 mm
thickness = from 0.2 to 3.5 mm

1.5 - Replacing gobos on the rotating gobo wheel

When replacing gobos as shown in the following diagrams, ensure that the projector is not turned on.

1. Open the projector housing as described above.
2. Loosen the screws as shown (photo 1) and remove the metal leaf to allow easier access to the gobos.
3. Release the gobo retaining spring and carefully remove the gobo (photo 2-3).
4. Reverse the procedure to install a replacement gobo.

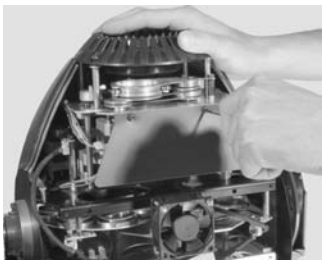


Photo 1

Photo 2

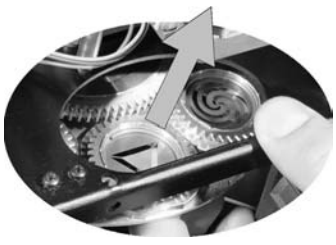


Photo 3

1.6 - Voltage and frequency:

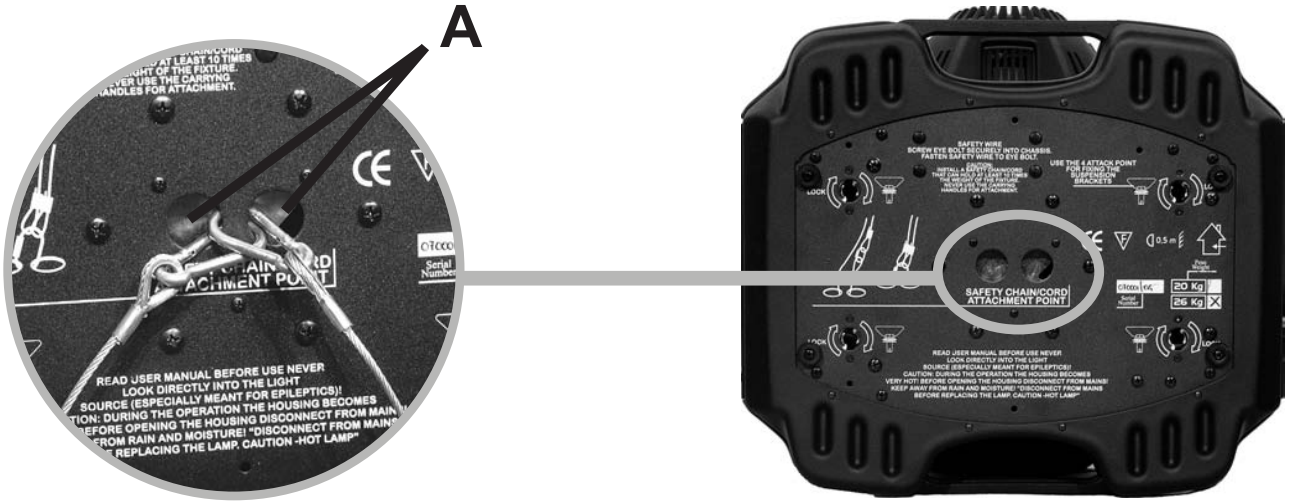
The projector can operate at 230V voltage, at 50 or 60 Hz. SGM presets a voltage of 230V at a frequency of 50Hz (barring specific requests).

1.7 - Fissaggio meccanico montaggio:

IDEA may be either floor or ceiling mounted.
For floor mounting installations, the IDEA is supplied with four rubber mounting feet on the base.
For ceiling mounted installations, we suggest the use of appropriate clamps or fixings to attach the fixture to the mounting surface.
The supporting structure from which the unit is hung should be capable of bearing the weight of the unit, as should any clamps used to hang it. The structure should also be sufficiently rigid so as not to move or shake whilst the IDEA moves during its operation.
Four quarter turn fast locks placed on the base of the units allow for the fixing of brackets that can then be fixed on to the rails with the use of C clamps or Aliscaf type clamps.

1.8 - Safety chain:

We recommend the use of a safety cable or chain connected to the IDEA and to the suspension truss in order to avoid the fixture accidentally falling should the main fixing point fail. Make sure that the iron cable or chain can bear the weight of the entire unit.
You may attach the safety chain to the two holes (A) located on the base of the fixture, as shown in the diagram below.

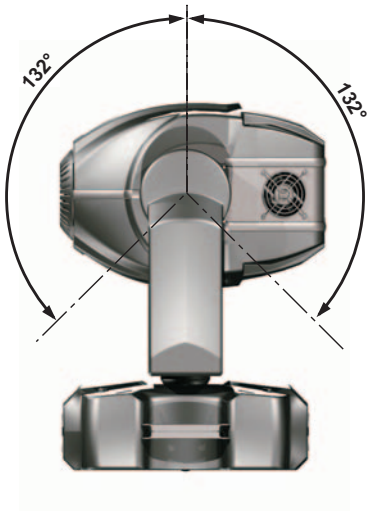


1.9 - Protection against liquids

The projector contains electric and electronic components which should under no circumstances come into contact with oil, water or any other liquid. The proper working of the unit would be compromised should this occur.

1.90 - Movement

The projector has a maximum movement of 540° in the base and 319° in the yoke. DO NOT place any obstructions in the path of the projector's movement.



1.91 - Risk of fire

Each fixture produces heat and must be installed in a well-ventilated position. The minimum recommended distance from flammable material is 0.5m. Minimum distance from the object being illuminated is 2 m.

1.92 - Forced ventilation

You will note, on inspection, that the fixture features various air inlets and cooling fans located on both the base and head of the fixture. These should, under no circumstances, be blocked or obstructed whilst the projector is in operation.
Doing so could cause the fixture to seriously overheat thereby compromising its proper operation.

1.93 - Ambient temperature

The projector should never be installed in places that lack a constant flow of air. The ambient temperature should NOT exceed 35°C.

1.94 - Mains connection

IDEA operates at voltage 230V at 50 or 60Hz.
Prior to connecting the unit to your mains supply, ensure that the model in your possession correctly matches the mains supply available. For connection purposes, ensure that your plug is of a suitable rating of 8 amps at 230V.
Strict adherence to regulatory norms is strongly recommended.

1.95 - Protection

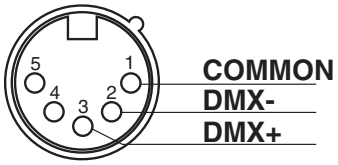
The use of a thermal magnetic circuit breaker is recommended for each IDEA.
A good earth connection is essential for the correct operation of the projector.

1.96 - Collegamento DMX:

Idea has a DMX 512 input fitted with standard 5-pin XLR connectors. Screened cables in compliance with EIA RS-485 specifications and the following characteristics must be used for connections:

- 2 conductors plus screen
- 120Ohm impedance
- low capacitance
- max. transmission rate 250kBaud.

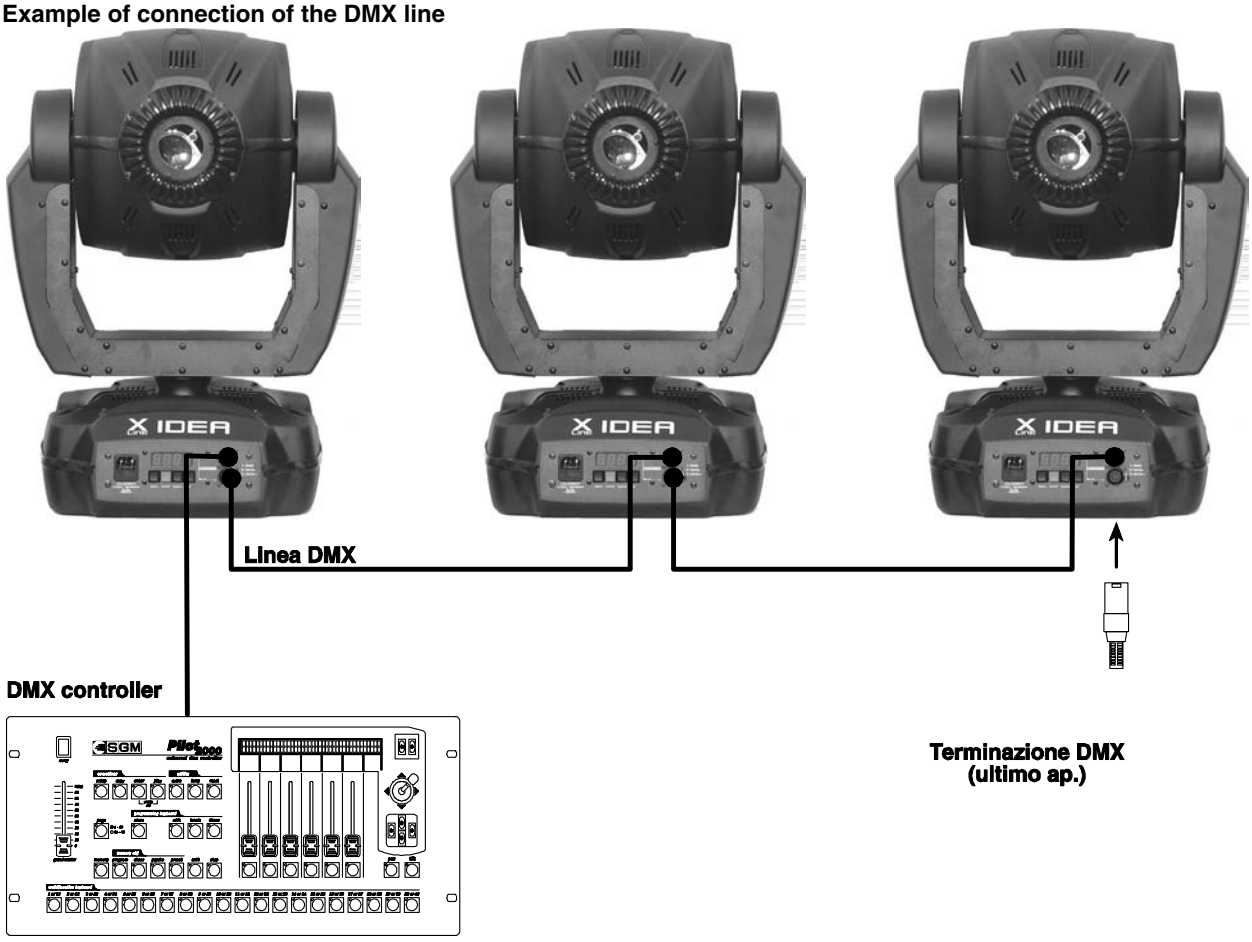
Cable connections:



see illustration, taking care with the screen, which must be connected to Pin 1

ATTENTION: the screened parts of the cable (sleeve) must NEVER be connected to the system's earth, as this would cause faulty fixture and controller operation.

Example of connection of the DMX line

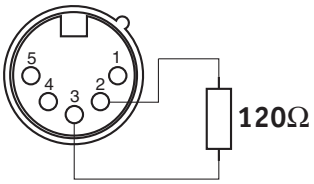


To avoid the risk of faulty operation, follow these indications:

- Maximum cable length: 500 metres
- Max. N° of fixtures connected: 32
- Cable runs: Avoid running cables alongside power supply lines.
- Termination: A 120Ohm resistor between Pins 2 and 3 on the last fixture.

1.97 - Construction of the DMX termination

The termination avoids the risk of DMX 512 signals being reflected back along the cable when they reaches the end of the line: under certain conditions and with certain cable lengths, this could cause them to cancel the original signals.
The termination is prepared by soldering a 120Ohm 1/4 W resistor between pins 2 and 3 of the 5-pin male XLR connector (see diagram).



The standard configuration of the IDEA is with XLR 5 pole connection.
To convert to an XLR 3 pole configuration proceed as follows:

1. Unscrew the external cover (photo 1).
2. Unscrew the screws that fix the connectors to the panel (photo 2).
3. Rotate the electronic card by 180° (photo 3).
4. Position the 3 pole connectors in the special holes and close.

photo 1

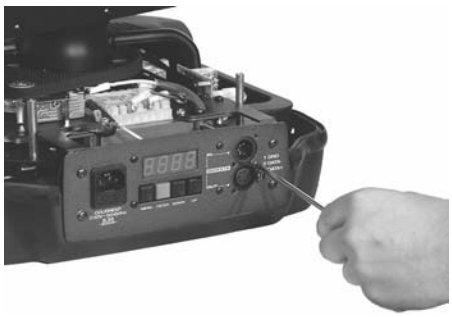


photo 2

photo 3

1.98 - DMX Addresses

IDEA can be used in two different modes: 14 or 16 DMX channels.
If you want to use a DMX controller with 14 channels, select the 14 CH mode from the MODE menu and set the following addresses:

Projector 1 A001
Projector 2 A015 If you want to select the next projector, just add “14”
Projector 3 A029
….. A….
Projector 6 A071

If you want to use a DMX controller with 16 channels, select the 16 CH mode from the MODE menu and set the following addresses:

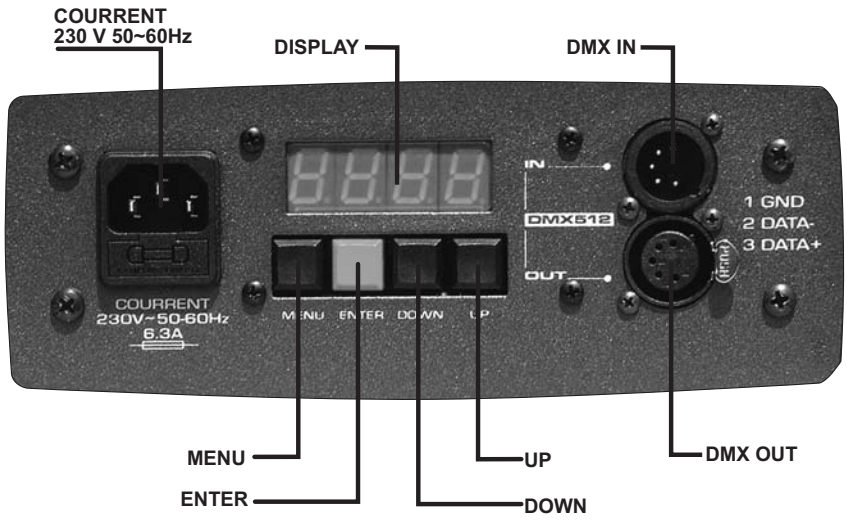
Projector 1 A001
Projector 2 A017 If you want to select the next projector, just add “16”
Projector 3 A033
….. A….
Projector 6 A081

1.99 - Changing the DMX address

1. Press the UP-DOWN key until you reach the required DMX number. The numbers on the display will start to flash (but the new DMX address hasn't yet been set).
2. Press ENTER to confirm your selection. The numbers on the display will stop flashing and the projector is now controlled by the new 512 DMX number.

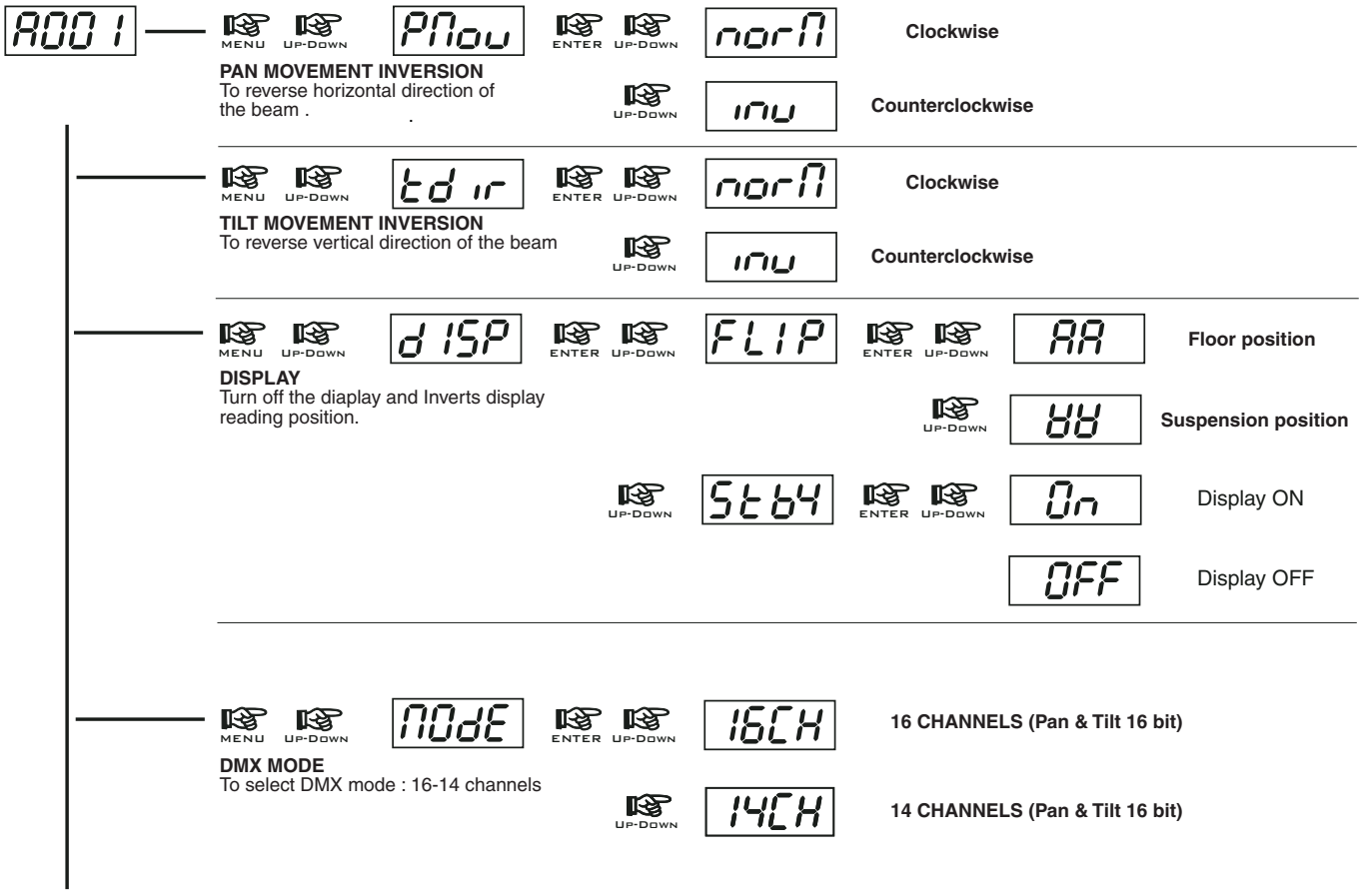
WARNING: if you press the UP-DOWN keys together the channels are calculated more quickly and you get a faster selection.

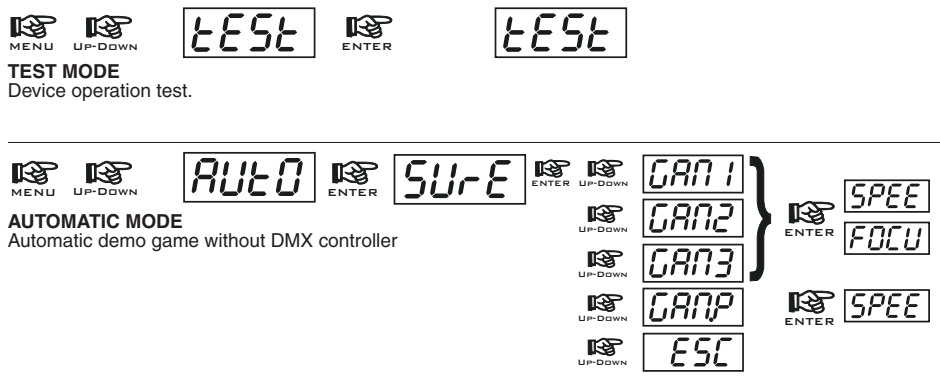
2.0 - Microcomputer Control



2.1 - Display functions

The IDEA display panel shows all the functions available. Using these functions, it is possible to change some of the parameters and to add some functions. Changing the SGM setting can vary the functions of the appliance so that it does not respond to the DMX 512 used to control it. Carefully follow the instructions below before carrying out any variations or selections.
NOTE: the symbol ☞ shows which key has to be pushed to obtain the function desired.





TEST MODE
Device operation test.

AUTOMATIC MODE
Automatic demo game without DMX controller

RESET
To reset all motors function via DMX

Fixture Reset
Enabled
Disabled

LAMP
ON/OFF lamp via DMX

Enabled
Disabled
OFF

DEFAULT
To restore default setting (set by SGM)

SOFTWARE VERSION
Electronic card software version.

Pcb 8 motors . Pcb PAN/TILT

FAN CONTROL
To control the fan speed.

TIMER
Visualization of lamp life (reset possible) and total time unit's working (reset not possible)

SPEED
To change the maximum speed of PAN and TILT movement

GOBO ROTATION
Activates roto gobos during the gobo change

REC
Record mode

SLAVE
Slave mode as run by GAM.P, Synchronised with master

2.2 - Automatic operation (AUTO)

IDEA can work in automatic mode without a DMX controller.
First of all connect the projectors with a DMX cable (picture below).

To activate Auto mode on the first unit, use the menu to run through the different modes until AUTO appears on the display, at this point press enter.
Now it is possible to choose between the different pre-programmed games (GAME 1-2-3) or Game P which is user programmable through REC mode. To confirm game activation press ENTER on the chosen GAME.

2.3 - Game 1-2

The first unit that will work as a Master should be placed in Automatic mode (AUTO), the other projectors have to be place in 16 channels DMX mode (MODE 16CH) and the DMX address should be set at A001.
Once a game is chosen and set it is possible to select the speed of the game (SPEE) and the gobo focus (FOCU).

2.4 - Game p

The first unit that will function as a Master must be put in (AUTO) mode, the other projectors have to be put in slave mode (selectable through the menu). In this way all units will be synchronised with the master, the projectors need not be of the same model.
On the master unit it is possible to vary the speed of the GAME P (SPEE)
NB: It is possible to run GAME P on the other units even though these do not have GAME P programmed. You can do this by setting the units to the same mode as the master is set before programming GAME P (14CH or 16CH DMX) and selecting A001 ad the DMX address.

2.5 - Modalità rec

It is possible to programme your own game on the IDEA that will then run in AUTO mode (GAME P). Each unit can have its own programmed game.
In REC mode each projector must be set to the same mode (14CH or 16CH DMX).
For the programming of GAME P besides the channels necessary to control the unit a further 3 DMX channels are needed. So that in REC mode if the 14CH mode is selected you will need 17 channels for the programme to work correctly whereas 16CH mode would occupy 19 channels.
Connect the unit to a DMX mixer/controller, every unit should be set to its own Address (See the paragraph on DMX addresses). The projectors can also be different of models: IDEA spot/wash. When you are in REC mode R.001 appears on the display (DMX address).
The three new DMX channels are:

SCENE channel:

- Form 0-255 are displayed the programmable scenes (max 16 scenes M.001 M016)

VIEW channel:

- From 1-19 the unit runs the scene that has been saved in the units memory and it is possible to play through the other scenes using the scene channel.
- From 20-235 the unit runs the configuration given by the received input DMX values. With the channel scene it is possible to pass from one scene to the next while with REC it is possible to record the selected scene.

- From 236-255 the unit runs the configuration given by the received DMX values from the projector in that moment. It is possible to select a scene and then close the GAME P with the REC channel.

Recording channel (REC)

Records the set scene with a variable between 0 and 255 (the display flashes indicating that the scene has been recorded).
It is advised that you keep the REC channel set to 0 and to run through the 255 only once you have decided to save the scene. If GAME P is not closed, by indicating the last scene, in playback mode all 16 scenes will be played through even if not programmed.

2.6 - Pan & Tilt speed (SPEE) (default: 2)

You can set the PAN and TILT engines at high speed on your IDEA.
Press menu until you see SPEE.
Press ENTER and select a speed with UP-DOWN (there are 4 speeds). Confirm by pressing ENTER.
When you use speed 4 (the highest) PAN and TILT speed is very high and your projector may loose its path. In this case, the encoder corrects the position.

2.7 - Fan speed (FANS)(default: 6)

Fan speed regulation makes it possible to reduce fan noise. However, the ambient temperature must be less than 35° C.

2.8 - Error messages

OPEr	ERROR: ENCODER PAN	COEr	ERROR: colour WHEEL POSITION
OtEr	ERROR: ENCODER TILT	rGEr	ERROR: GOBO WHEEL POSITION
AdEr	ERROR: DMX ADDRESS	LSEr	ERROR: LENSES WHEEL POSITION
dtEr	ERROR: LOAD DATA EEPROM	iGEr	ERROR: ROTOGOBO POSITION
SCEr	ERROR: SENSOR CIRCUIT COLOR/BEAM ANGLE	nbEr	ERROR: INTERNAL COMMUNICATION
SGEr	ERROR: SENSOR CIRCUIT GOBO/ROTOGOBO	AUEr	ERROR: AUTO MODE INPUT

2.9 - Hidden menu

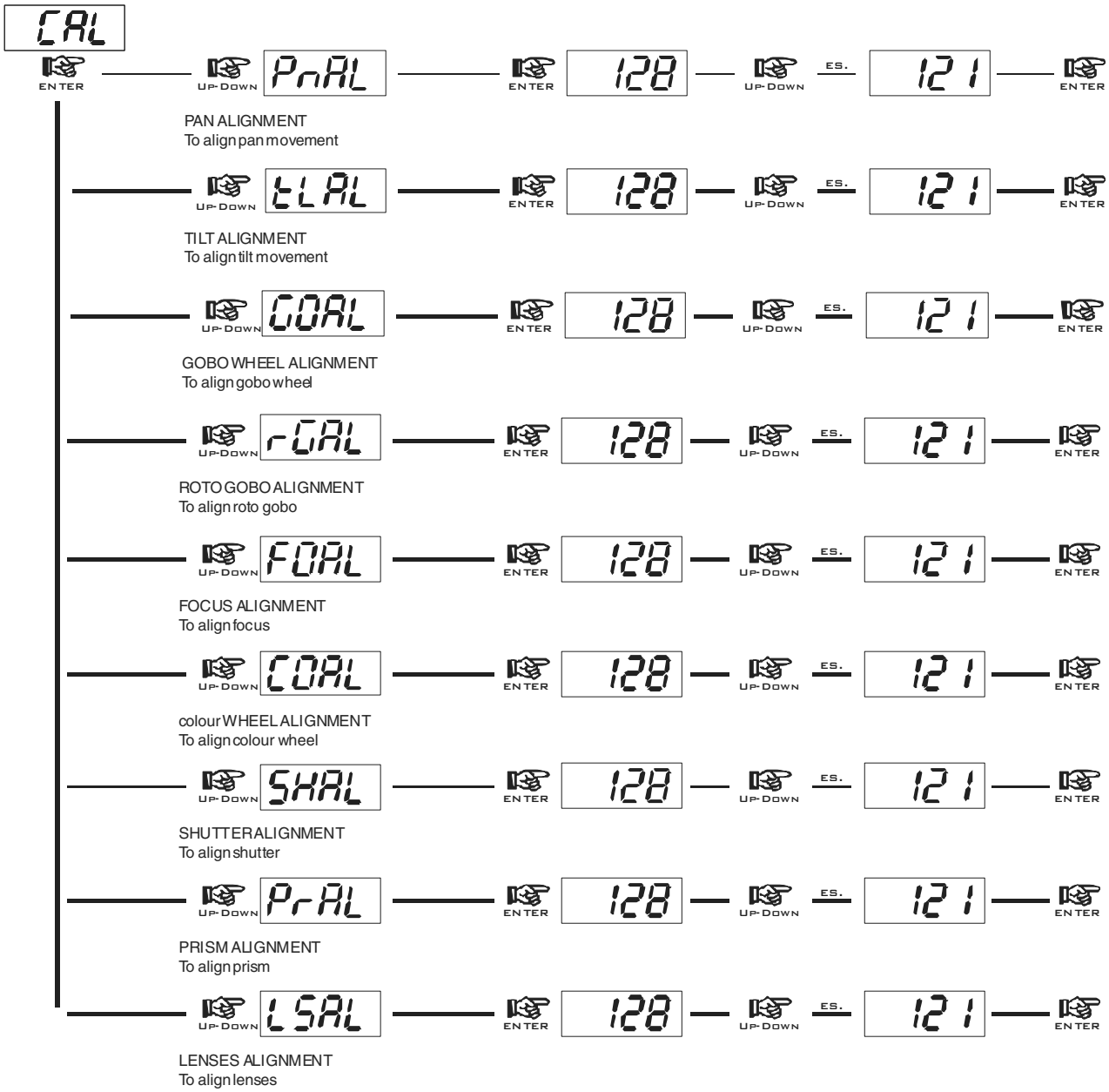
For technical personnel only.
To operate this menu:

1. Connect the projector to the DMX controller (DMX SIGNAL MUST BE CORRECTLY RECEIVED)
2. Reset the IDEA (reset from the display projector, not from the DMX controller!).
3. While reset is working, press the MENU and ENTER keys at the same time.

CAL Electronic calibration of the motors.

rESN Reset EEPROM (Reset all settings. ATTENTION: by pressing this key you must repeat all previous calibrations)

ESC Exit from hidden menu.



3.0 - Periodic cleaning

3.1 - Lenses and reflectors

Even a fine layer of dust can reduce the luminous output substantially. Regularly clean all lenses and the reflector using a soft cotton cloth, dampened with a specialist lens cleaning solution.

3.2 - Fans and air passages

The fans and air passages must be cleaned approximately every 6 weeks. This periodic cleaning will depend of course, on the conditions in which the projector is operating. Suitable instruments for performing this type of maintenance are a brush and a common vacuum cleaner or an air compressor. If necessary, clean the fans and air passages more frequently.

16 CHANNELS MODE (16CH)

1	**PAN msb**
2	**PAN lsb**
3	**TILT msb**
4	**TILT lsb**
5	**SPEED MOVEMENT**
6	**COLOUR**
7	**GOBO**
8	**SHUTTER**
9	**DIMMER**
10	**ROTOGOBO**
11	**PRISM/ROTOPRISM**
12	**PROPORTIONAL COLOUR (Prioritario)**
13	**FOCUS**
14	**LIGHT BEAM ANGLE**
15	**RESET/LAMP**
16	**FROST**

Movement speed – ch 5-

DMX Value	Central Value	Function
0-10	5	Standard
11-25	18	Fast movement
26-127	76	Vector mode from fast to slow
128-247	187	Variable time reaction to DMX signal (fast to slow)
248-255	251	Slow reaction time to DMX signal

Colour – ch 6 -

DMX Value	Central Value	Function
0-10	5	Color1
11-21	16	Bicolor ½
22-32	27	Color2
33-43	38	Bicolor 2/3
44-54	49	Color3
55-65	60	Bicolor 3/4
66-76	71	Color4
77-87	82	Bicolor 4/5
88-98	93	Color5
99-109	104	Bicolor 5/6
110-120	115	Color6
121-131	126	Bicolor 6/7
132-142	137	Color7
143-153	148	Bicolour 7/8
154-164	159	Color8
165-175	170	Bicolour 8/9
176-186	181	Color9
187-197	192	Bicolour 9/1
198-200	199	Right rotation speed 1 min.
201-203	200	Right rotation speed 2
204-206	205	Right rotation speed 3
207-209	208	Right rotation speed 4
210-212	211	Right rotation speed 5
213-215	214	Right rotation speed 6
216-218	217	Right rotation speed 7
219-221	220	Right rotation speed 8
222-224	223	Right rotation speed 9 max.
225-228	226	Stop
229-231	230	Left rotation speed 1 min.
232-234	233	Left rotation speed 2
235-237	236	Left rotation speed 3
238-240	239	Left rotation speed 4
241-243	242	Left rotation speed 5
244-246	245	Left rotation speed 6
247-249	248	Left rotation speed 7
250-252	251	Left rotation speed 8
253-255	254	Left rotation speed 9 max.

Gobo – ch 7 –

DMX Value	Central Value	Function
0-25	12	Open
26-51	38	Gobo 1
52-77	64	Gobo 2
78-103	90	Gobo 3
104-129	116	Gobo 4
130-155	142	Gobo 5
156-181	168	Gobo 6
182-207	194	Gobo 7
208-213	210	Speed rotation 1 min.
214-219	216	Rotazione peed 2
220-225	222	Speed rotation 3
226-231	228	Speed rotation 4
232-237	234	Speed rotation 5
238-243	240	Speed rotation 6
244-249	246	Speed rotation 7
250-255	252	Speed rotation 8 max.

Shutter – ch 8 -

DMX Value	Central Value	Function
0-9	5	Black-out
10-23	16	Strobo random speed
24-37	30	Strobo speed 1 min.
38-51	44	Strobo speed 2
52-65	58	Strobo speed 3
66-79	72	Strobo speed 4
80-93	86	Strobo speed 5
94-107	100	Strobo speed 6 max.
108-121	114	Pulse open speed 1 min.
122-135	128	Pulse open speed 2
136-149	142	Pulse open speed 3
150-163	156	Pulse open speed 4 max.
164-177	170	Pulse closed speed 1 min.
178-191	184	Pulse closed speed 2
192-205	198	Pulse closed speed 3
206-219	212	Pulse closed speed 4 max.
220-227	225	Colour and Gobo in black-out
228-233	230	Pan and Tilt in black-out
234-255	244	Open

Dimmer – ch 9 -

DMX Value	Central Value	Function
0-8	4	Black-out
9-255		Proportional dimmer

Roto gobo – ch 10 -

DMX Value	Central Value	Function
0-127		Proportional from 0° to 360°
128-180		Left rotation
181-202	191	Stop
203-255		Right rotation

Prism / rotoprism – ch 11 -

DMX Value	Central Value	Function
0-63	32	No effect
64-127	95	Prism inserito
128-191		Left rotation
192-255		Right rotation

Proportional colour – ch 12 -

DMX Value	Central Value	Function
0-10	5	No effect
11-255		Proportional colour

Focus – ch 13 -

DMX Value	Central Value	Function
0-255		Linear regulation

Light beam angle – ch 14 -

DMX Value	Central Value	Function
0-84	42	No lens 13°
85-170	127	First lens 18°
171-255	213	Second lens 21°

Reset / Lamp – ch 15 –

DMX Value	Central Value	Function
0 - 29	15	No effect
30 - 85	50	Lamp OFF (activated after 3 seconds)
86 - 170	130	Internal motor reset
171 - 235	200	Total reset
236 - 255	245	Lamp ON (activated after 3 seconds)

Frost – ch 16 -

DMX Value	Central Value	Function
0-127	63	No lens
128-255	191	Frost

14 CHANNELS MODE (14CH)

1	PAN
2	TILT
3	SPEED MOVEMENT
4	COLOUR
5	GOBO
6	SHUTTER
7	DIMMER
8	ROTOGOBO
9	PRISM/ROTOPRISM
10	PROPORTIONAL COLOUR
11	FOCUS
12	LIGHT BEAM ANGLE
13	RESET / LAMP
14	FROST

Movement speed – ch 3-

DMX Value	Central Value	Function
0-10	5	Standard
11-25	18	Fast movement
26-127	76	Vector mode from fast to slow
128-247	187	Variable time reaction to DMX signal (fast to slow)
248-255	251	Slow reaction time to DMX signal

Colour – ch 4 -

DMX Value	Central Value	Function
0-10	5	Color 1
11-21	16	Bicolor ½
22-32	27	Color 2
33-43	38	Bicolor 2/3
44-54	49	Color 3
55-65	60	Bicolor 3/4
66-76	71	Color 4
77-87	82	Bicolor 4/5
88-98	93	Color 5
99-109	104	Bicolor 5/6
110-120	115	Color 6
121-131	126	Bicolor 6/7
132-142	137	Color 7
143-153	148	Bicolour 7/8
154-164	159	Color 8
165-175	170	Bicolour 8/9
176-186	181	Color 9
187-197	192	Bicolour 9/1
198-200	199	Right rotation speed 1 min.
201-203	200	Right rotation speed 2
204-206	205	Right rotation speed 3
207-209	208	Right rotation speed 4
210-212	211	Right rotation speed 5
213-215	214	Right rotation speed 6
216-218	217	Right rotation speed 7
219-221	220	Right rotation speed 8
222-224	223	Right rotation speed 9 max.
225-228	226	Stop
229-231	230	Left rotation speed 1 min.
232-234	233	Left rotation speed 2
235-237	236	Left rotation speed 3
238-240	239	Left rotation speed 4
241-243	242	Left rotation speed 5
244-246	245	Left rotation speed 6
247-249	248	Left rotation speed 7
250-252	251	Left rotation speed 8
253-255	254	Left rotation speed 9 max.

Gobo – ch 5 –

DMX Central	Central Value	Function
0-25	12	Open
26-51	38	Gobo 1
52-77	64	Gobo 2
78-103	90	Gobo 3
104-129	116	Gobo 4
130-155	142	Gobo 5
156-181	168	Gobo 6
182-207	194	Gobo 7
208-213	210	Speed rotation 1 min.
214-219	216	Rotazione peed 2
220-225	222	Speed rotation 3
226-231	228	Speed rotation 4
232-237	234	Speed rotation 5
238-243	240	Speed rotation 6
244-249	246	Speed rotation 7
250-255	252	Speed rotation 8 max.

Shutter – ch 6 -

DMX Value	Central Value	Function
0-9	5	Black-out
10-23	16	Strobo random speed
24-37	30	Strobo speed 1 min.
38-51	44	Strobo speed 2
52-65	58	Strobo speed 3
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164-177	170	Pulse closed speed 1 min.
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192-205	198	Pulse closed speed 3
206-219	212	Pulse closed speed 4 max.
220-227	225	Colour and Gobo in black-out
228-233	230	Pan and Tilt in black-out
234-255	244	Open

Dimmer – ch 7 -

DMX Central	Central Value	Function
0-8	4	Black-out
9-255		Proportional dimmer

Roto gobo – ch 8 -

DMX Central	Central Value	Function
0-127		Proportional from 0° to 360°
128-180		Left rotation
181-202	191	Stop
203-255		Right rotation

Prism/rotoprism – ch 9 -

DMX Central	Central Value	Function
0-63	32	No effect
64-127	95	Prism inserito
128-191		Left rotation
192-255		Right rotation

Proportional colour – ch 10 -

DMX Value	Central Value	Function
0-10	5	No effect
11-255		Proportional colour

Focus – ch 11 -

DMX Value	Central Value	Function
0-255		Linear regulation

Light beam angle – ch 12 -

DMX Value	Central Value	Function
0-84	42	No lens13°
85-170	127	First lens 18°
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Reset / Lamp – ch 13 -

DMX Value	Central Valuel	Function
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86 - 170	130	Internal motor reset
171 - 235	200	Total reset
236 - 255	245	Lamp ON (activated after 3 seconds)

Frost – ch 14 -

DMX Value	Central Value	Function
0-127	63	No lens
128-255	191	Frost

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